

## ABSTRACT

1. A method for operating an electronic module which is supplied with electrical energy by an operating voltage source with a circuit unit for carrying out at least one system function, wherein in the event of an operating voltage interruption the operating voltage is supplied by a system-autonomous capacitor and wherein the system function can be activated by means of the energy reserve supplied by a function-autonomous capacitor and in which furthermore the system-autonomous capacitor is charged by a voltage converter connected to the operating voltage source.
- 2.1. From DE 197 15 571 A1 a control circuit for security units is known, wherein an up-converter fed by an on-board supply system supplies a system-autonomous capacitor, whose charging voltage serves as an operating voltage for the subsequently connected circuit units, in particular a down-converter, which on its part supplies for example ignition power modules as concerns the operating voltage, each of these power modules comprising its own ignition-autonomous capacitor.
- 2.2. In accordance with the invention the method is characterized in that the function-autonomous capacitor is connected to the voltage converter by means of a charging connection and that it can be controlled in order to fulfil various functions in different operating states, and that is both in a switching mode for clocking the charging current charging the function-autonomous capacitor, and in a current source mode wherein the charging connection operates as a controlled resistance, both for producing a constant discharging current for checking the system-

autonomous capacitor and for producing a re-loading current  
for re-loading the function-autonomous capacitor.

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